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Iran wind power photovoltaic energy storage project

Overview

How many MW of solar power does Iran have?

However, 27 MW of installed wind power capacity was added to the system in 2014 (Farfan and Breyer 2017). Solar power generation has seen high growth in recent years, mainly through photovoltaics (PV) and followed by concentrating solar thermal power (CSP) plants in Iran.

Is solar energy a viable option in Iran?

The potential for PV is extremely high in Iran, mainly due to having about 300 clear sky sunny days per year on two-thirds of its land area and an average 2200 kWh solar radiation per square meter (Najafi et al. 2015).

How much wind power does Iran have in the MENA region?

Although Iran was the leader in the MENA region with regard to power generation from wind energy with 92 MW installed capacity in 2010 (Farfan and Breyer 2017), it has experienced flat growth in recent years. However, 27 MW of installed wind power capacity was added to the system in 2014 (Farfan and Breyer 2017).

What is the main energy resource in Iran?

Natural gas has been the main energy resource in Iran so far with a share of 60% of total primary energy consumption in 2013, following by oil with 38%, hydropower with 1–2%, and a marginal contribution of coal, biomass and waste, nuclear power and non-hydro renewables (BP Group 2014; EIA 2015).

Are wind turbines profitable in Iran?

Besides, the installation of wind turbines in windy regions of the country, constructing wind farms, and distributed small-scale and centralized PV plants are already profitable in numerous regions in Iran (Ghobadian et al. 2009; Alamdari et al. 2012; Aguilar et al. 2015).

Which energy sources are least exploited in Iran?

Modern biomass, waste-to-energy and geothermal power production are the least exploited energy sources in Iran. However, waste-to-energy projects will become more important. The installed RE capacity in Iran can be seen in Table 2. Table 2 Installed RE capacity in Iran (MW)

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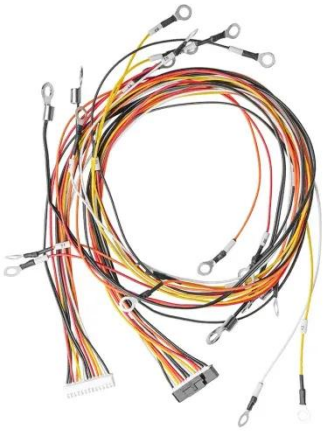

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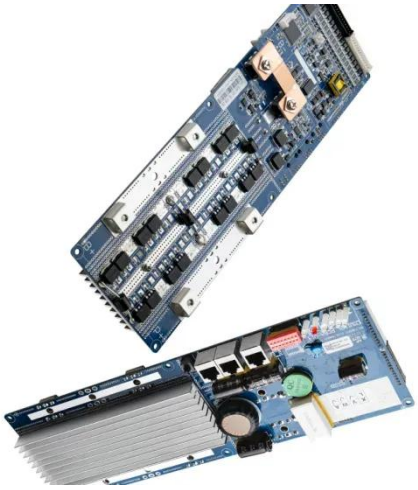

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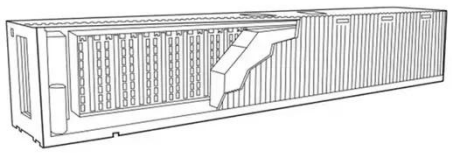

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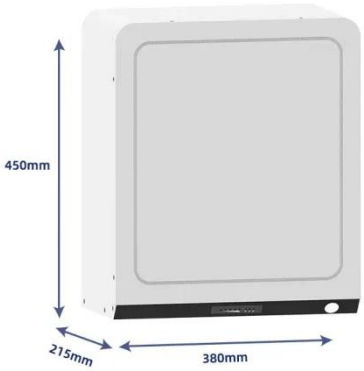

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